Office of Research Services

VIVARIUM

NIH DESIGN POLICY AND GUIDELINES

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Administration

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John J. Pallas, P.E.
Past Assistant Director for Design and Construction Branch
Division of Engineering Services

George B. Williams, P.E.
Acting Assistant Director for Design and Construction Branch
Division of Engineering Services

Rassa Davoodpour
Principal Mechanical Engineer, Project Director,
Design and Construction Branch,
Division of Engineering Services

Vivarium

NIH Design Policy and Guidelines

Preface

The National Institutes of Health (NIH), an agency of the United States federal government, is dedicated to advancements in biomedical research to further knowledge about the cure and prevention of human disease. The organizational components of NIH are referred to as Institutes, Centers or Divisions (ICD). These ICDs conduct their biomedical research programs primarily at the NIH Bethesda, Maryland campus. The Office of Management has within its organization divisions that provide expertise in planning, design, architecture, engineering, construction, maintenance, safety, security, procurement, logistics, and contracts for the maintenance, renovations, and construction of new facilities. The Design and Construction Branch (DCB) of the Division of Engineering Services (DES) is responsible for the design and construction of facilities at the NIH.

The DES, along with selected consultants, was tasked with the responsibility of reviewing existing biomedical facility guidelines and related studies and creating a new set of guidelines for the NIH which would reflect the latest developments in facility planning and operation technology. Within the Office of Director, NIH, the Office of Management (OM) is the organization component that handles planning, architectural/engineering design, construction, maintenance, safety, security, procurement, logistics, and renovations at NIH.

Committees covering the disciplines of architecture, structure, mechanical systems, electrical systems, plumbing, fire protection, controls, civil and environmental matters met over an 8-month period to merge, edit, and create documents from various sources. The primary sources of information were the Generic Technical Criteria document (developed as part of the Program of Requirements for the Clinical Center Complex Renewal Program and formulated by the DES Special Project Office), the original Design Policy and Guidelines (the "Rosebook," developed by the DES Facilities and Planning Branch), and the Design Guidelines (developed by the DES Facilities Planning Office).

In conjunction with these new guidelines, the NIH Architectural/Engineering Checklist and Standard Details have been developed. The NIH Design Policy and Guidelines consists of Text Volumes identified by building type, Data Sheets specific to space or activity functions, Guideplates suggesting functional groupings, and Reference Materials pertinent to the federal biomedical, vivarium, and research hospital facilities. This collective information must be incorporated into the basis of design for all new construction and renovation projects at NIH.

Introduction

The new NIH Design and Policy Guidelines have been developed to provide minimum criteria to assist architects, planners, and engineers in the process of designing research, vivarium, and clinical center facilities for the NIH. These guidelines establish basic parameters only and are not meant to be restrictive. The NIH recognizes that an essential aspect of the design professional's responsibility is originality and imaginative design.

The NIH requires that all projects be planned and designed using a total environmental approach, including attention to site, structure, massing, circulation, visual harmony, and open areas. The combination of these relationships creates a product that is both functional and aesthetic. The architect/engineer must adapt these criteria to meet needs requested by users or imposed by specific site conditions or functional relationships. It is extremely important to recognize that the user is an essential part of this process and is integral to its success.

It is assumed that the selected architect/engineer and his or her consultants will be professionals knowledgeable in the design of these types of facilities. They will be required to assure that each specific project complies with all established codes, regulations, and current practices. These guidelines do not relieve the architect/engineer of their responsibilities as design professionals. Rather, they are intended to supplement the design process and to consolidate established policies and guidelines developed at the NIH based on operational experience. These guidelines have been devised to assist with establishing greater consistency among the facilities as well as offering the Architect/Engineer assistance with designing to NIH preferences.

The structure of the Design Policy and Guidelines is based on facility type and has been separated into four volumes of information as follows:

Research Laboratory Design Policy and Guidelines
Vivarium Design Policy and Guidelines
Clinical Center Design Policy and Guidelines
Reference Material for the Design Policy and Guidelines

The Clinical Center Design Policy and Guidelines refer specifically to the NIH Clinical Center research hospital located on the Bethesda campus. This facility is the primary focus of the NIH and houses many laboratory, vivarium and administrative areas in addition to the hospital function.

Use of the Guidelines

These guidelines define minimum standards by which architects and engineers shall design facilities on the NIH intramural campuses. These campus areas include the Main NIH Campus in Bethesda, the NIH Animal Center in Poolesville, the NIEHS Campus in North Carolina, and the Rocky Mountain Laboratory Campus in Montana. The Research Laboratory and Vivarium volumes are to be used for both new construction and renovation. The Clinical Center volume is to be used only for renovations of the existing Clinical Center.

These volumes of the guidelines have been organized into sections from general to specific requirements as follows:

A. Introduction
B. Planning Goals and Objectives
C. Space Descriptions
D. Design Criteria
E. Room Data Sheets
F. Appendix

Sections A. through D. provide the basic policy and guidelines in text format. Section E., the Room Data Sheets section, provides detailed data requirements for all types of spaces associated with research, vivarium and the Clinical Center. Section F, Appendix, lists the acronyms, units of measure associated with the document, and the committees, contributors, and founders that were instrumental in creating the guidelines.

The final volume collects all relevant reference material or describes reference material required for the design and construction of all types of NIH facilities. Included in this volume is the A/E Checklist, which lists the services that may be required by phase for projects at NIH.

The primary focus of these guidelines is to assist in standardizing the design approach to new and existing facilities on the Bethesda campus. The Clinical Center volume is based solely on the Clinical Center and its existing functions and spaces.

This document is intended to be used by all divisions within the Office of Research Services, primarily the branches and offices of the Division of Engineering Services.

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